

REMARKS

Entry of the amendments is respectfully requested. Claims 5, 12, and 23 have been canceled. Claims 1, 4, 6, 7, 13-17, 21, 24, 25, 29, and 30 and have been amended. New claims 31-33 have been added. Claims 1-4, 6-11, 13-22, and 24-33 are pending in the application. Favorable reconsideration and allowance of this application is respectfully requested in light of the foregoing amendments and the remarks that follow.

1. Amendments to the Specification

The specification has been amended to correct a minor typographical error found upon a review of the application. Specifically, on page 8, line 19 “are” has been inserted between “wide” and “placed.”

2. Rejections Based on the Prior Art

a. Recapitulation of the Invention¹

The invention relates to a barricade system and includes supports positioned in a spaced-apart fashion across an airport taxiway to be closed. A lightable rope is fastened to the supports to close the airport taxiway to vehicular traffic. The lightable rope is energizable by a single electrical power source such as a generator or an electrical outlet. The components of the system can be stowed and transported on a trailer or the like,

¹ This Section 2a is intended to provide the Examiner with some background information on the state of the art and applicant's contribution to it. It is *not* intended to distinguish specific claims from the prior art. That task is performed in Sections 2b and 2c below.

making the system very portable. The barricade system is particularly suited for use in closing airport taxiways, in which case it warns pilots that a taxiway is closed and prevents entry onto the taxiway. The entire system (or at least those parts of it that are placed on the taxiway) also is sufficiently frangible to permit its use as a taxiway barricade system.

b. Rejection of Claims 1, 7-10, 15, and 17-19 Under 35 U.S.C. § 102(e)

Claims 1, 7-10, 15, and 17-19 stand rejected under § 102(e) as being anticipated by Chien (U.S. Patent 6,082,867). The applicant respectfully traverses this as it may be applied to amended claims 1, 7-10, 15, and 17-19 because, as is discussed below, the Chien patent does not disclose each and every element of the novel subject matter disclosed and set forth in the amended claims. Notably, Chien lacks supports that comprise stanchions and bases that hold the stanchions. Therefore, reconsideration is in order and is respectfully requested.

Independent claim 1 recites a system for closing an airport taxiway to vehicular traffic. Claim 1 has been amended to require

supports which are positionable in a spaced-apart fashion
across a ~~path~~ the airport taxiway to be closed and which
comprise stanchions and bases which hold the stanchions;
and

Independent claim 15 recites a system for closing an airport taxiway path to vehicular traffic. Claim 15 has been amended to require

stanchions and bases which hold the stanchions, both of
which are positioned in a spaced-apart fashion across the
~~path~~airport taxiway; and

Independent claim 17 recites a method of closing an airport taxiway. Claim 17
has been amended as follows:

positioning bases ~~supports~~ across the ~~path~~airport taxiway
in a spaced-apart fashion;
attaching stanchions to the bases;
fastening a lightable rope to the ~~supports~~ stanchions to
close the ~~path~~airport taxiway to vehicular traffic; and

The Chien patent discloses a three-dimensional electro-luminescent lighting element that includes a center conductor 1 surrounded by at least one said of electro-luminescent layers 2, which in turn is surrounded by an outer conductor 3. (col. 6, lines 10-13). The three-dimensional electro-luminescent lighting element is surrounded by a protective outer layer 15 made of PVC or a like material. (col. 6, lines 64-66). The electro-luminescent lighting element may be included in various applications, most notably a jersey barrier 116, street barricade 117, guard rail installation 118, and traffic cone-barrier 119, as are illustrated in Figs. 6A-6D of Chien. None of these applications include stanchions and bases which hold, as amended claims 1 and 15 require. In addition, none of Chien's applications include bases that are attached to stanchions, as amended claim 17 requires.

The claimed barricade system that includes supports which comprise stanchions and bases which hold the stanchions can be quickly assembled and disassembled. The

claimed method of closing an airport taxiway in which bases are positioned across the airport taxiway in a spaced-apart fashion and stanchions are attached to the bases provides a rapid method for closing the taxiway. In contrast, the various applications disclosed in Chien cannot be quickly assembled and disassembled. For instance, the jersey barrier shown in Fig. 6A typically is made from concrete, a material which, due to its weight, cannot be used in a barrier system that is rapid to assemble and disassemble.

Dependent claims 8-10 and 18-19 are believed to be in condition for allowance for incorporating by reference the limitations of claims 1 and 17, respectively, and for defining additional features of the invention, which when considered in combination with those of claims 1 and 17 are not disclosed by the prior art relied upon in the rejection.

In sum, the Chien patent fails to disclose each and every limitation of the amended claims. In light of the amendments to the claims and the foregoing, withdrawal of the rejection of claims 1, 7-10, 15, and 17-19 is respectfully requested.

c. Rejection Under 35 U.S.C. § 103

i. The Rejection of Claims 4, 6, 11, and 22

The rejection of claims 4, 6, 11, and 22 as unpatentable over the Chien patent in view of the York patent (U.S. Patent 4,090,472) is respectfully traversed, because, *inter alia*, the York patent is not properly combinable with the Chien patent. Furthermore, even if the references were combined, the invention would not result. The Examiner correctly recognizes that Chien fails to disclose the claimed barricade system further

comprising a reel on which the lightable rope can be retained. The Examiner cites York to cure this deficiency. However, York is not properly combinable with Chien because 1) it is non-analogous art and 2) it teaches away from the claimed invention.

The York patent discloses a corral for horses that includes a plurality of posts 52, a flexible hot line 54, and a warning or guard line 56. (col. 5, lines 7-10). A power source is mounted on a side wall 18 of the trailer 10. The power source is a 6-volt electric battery contained within a waterproof housing. (col. 6, lines 50-53). A large reel 118 is carried on the trailer (at side wall 18) upon which the hot line 54 and guard line 56 can be retained. (col. 6, line 63-col. 7, line 3).

The York patent is non-analogous art, as it discloses a trailer 10 and a corral enclosure 12 for horses. (col. 4, lines 21-26). A prior art reference is analogous if the reference is in the field of applicant's endeavor or, if not, the reference is reasonably pertinent to the particular problem with which the inventor was concerned. MPEP 2145 (citing *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992)). Neither condition is met here. First, the York patent describes a corral enclosure for horses. Clearly, a corral enclosure for horses is *not* in the field of the applicant's endeavor.

Second, the York patent is *not* reasonably pertinent to the particular problem with which the inventor was concerned. The applicant's particular problem involved how to close an airport taxiway to vehicular traffic. For such, the applicant had to consider, e.g., how to close an airport taxiway and yet have the system (or at least those parts of it that

are placed on the taxiway) be sufficiently frangible to permit its use as a taxiway barricade system. (specification, page 3, lines 7-8). With previous barricades, any airplane that ran into them was likely to suffer nose and propeller damage. (specification, page 1, line 17-18). The applicant's problem thus involved how to provide a system that would permit an airplane or another airport vehicle to strike the system, and yet break such that minimal, if any, damage is inflicted on the airplane or other airport vehicle. In contrast, the problems confronting the inventor of the York patent included how to get horses into a corral enclosure, how to contain horses within the corral enclosure, and how to move the horses back into the trailer from the corral enclosure. These are very different problems than the problem that the applicant faced. Therefore, because neither of the two conditions for analogous art are met, the York patent cannot be considered analogous art. As such, it is not properly combinable with the Chien patent.

Furthermore, the York patent teaches away from the claimed invention. A prior art reference teaches away from the proposed combination of references if it leaves the impression that the product would not have the property sought by the applicant. *In re Caldwell*, 319 F.2d 254, 256, 138 USPQ 243, 245 (C.C.P.A. 1963). In the York patent, the trailer becomes part of the corral enclosure. This is essential because the horses are transported in the trailer 10. When they are to be let out, the corral is built to include the trailer so that when the door 22 of the trailer 10 is opened, the horses immediately enter the corral. When the horses are returned to the trailer 10, they are moved directly from the corral back into the trailer. Clearly, combining this teaching with those of the Chien

patent would produce a product that has a property *not* sought by the applicant. The York patent is not properly combinable with the Chien patent because it teaches away from the claimed invention. (“It is improper to combine references where the references teach away from their combination.” MPEP 2145 (citing *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983))). For these two reasons, i.e., the York patent is non-analogous art and teaches away from the claimed invention, it is not proper to combine the teachings of the York and Chien patents. Furthermore, even if the references were combined, the invention would not result.

Claim 4 has been amended to require “wherein, when the system is in use, the lighted rope includes a first end which is supported by one of the supports and a second end which is supported by the reel.” The combination of Chien and York fails to disclose a barricade system in which a lighted rope includes a first end which is attached to one of the supports and a second end which is supported by the reel when the system is in use. In contrast, in York, the trailer 10 becomes part of the corral structure, and one end of a hot line 54 is connected to one side of the trailer 10, and another end of the hot line 54 is connected to another side of the trailer 10, as is shown in Figs. 2 and 3.

Claim 6 depends from claim 1, which requires that the supports “comprise stanchions and bases which hold the stanchions.” Claim 6 further requires “wherein the stanchions are removable from the bases.” As noted above, the Chien patent fails to teach or suggest supports that comprise stanchions and bases. Chien further fails to teach or suggest stanchions that are *removable* from the bases, as claim 6 further requires.

York cannot cure this deficiency as York fails to disclose such supports. Instead, the York patent uses posts 52, which are driven into the ground at spaced intervals. (col. 9, lines 6-9). The hot line 54 and guard line 56 are extended through a hole 70 on each post 52. Thus, posts 52 are not analogous to supports that comprise stanchions and bases that hold stanchions. Furthermore, posts 52 do not have a stanchion that is removable from a base.

To address the removable requirement of claim 6, the Examiner cites the subassemblies 38 in York with tubular sleeves 42 positioned to be inserted into an extending ground plate 40. The Examiner further contends that York's subassemblies in combination with Chien's traffic cone make the claimed invention obvious. However, the subassemblies 38 of York are used to rest the rear bumper 36 of the trailer thereon (col. 4, lines 58-62). The subassemblies are not supports "which are positionable in a spaced-apart fashion across a path to be closed," nor are they supports on which a lightable rope is fastenable to close the path to vehicular traffic. Thus, York, alone or in combination with Chien, does not teach or suggest a support "wherein the stanchions are removable from the base," as claim 6 requires.

The combination of Chien and York also fails to disclose the barricade system disclosed in claim 11, which requires the supports to comprise stanchion and bases which hold the bases.

Claim 22 recites a method of closing a path. Claim 22 depends from claim 17, which has been amended to require,

positioning bases ~~supports~~ across the ~~path~~ airport taxiway
in a spaced-apart fashion;
attaching stanchions to the bases;
fastening a lightable rope to the ~~supports~~ stanchions to
close the ~~path~~ airport taxiway to vehicular traffic; and

As should be apparent from above, the combination of Chien and York fails to disclose such a method. In light of the amendments to the claims and the foregoing, claims 4, 6, 11, and 22 are believed to define over the combination of Chien and York.

ii. The Rejection of Claims 12, 13, 21, 23, and 24

The rejection of claims 12, 13, 21, 23, and 24 as being unpatentable over Chien is respectfully traversed as it may be applied to the amended claims, as there is no teaching or suggestion to modify the reference to produce the invention of the amended claims. (MPEP § 2143.01). Furthermore, even if the reference were modified as suggested by the Examiner, the invention would not result. Claims 12 and 23 have been canceled, obviating the rejection of these claims.

Claim 13 recites a barricade system for an airport taxiway and has been amended to require

a lightable rope which is fastened to the supports to close the airport taxiway to vehicular traffic and which is energized by a single electrical power source, wherein the supports and the lightable rope are sufficiently frangible to permit their use on the airport taxiway.

The Chien patent fails to teach or suggest a barricade system that can be used to close an airport taxiway, as claim 13 requires. Claim 13 further requires supports and

lightable rope that are sufficiently frangible to permit their use on the airport taxiway. The various applications of a three-dimensional electro-luminescent lighting element 115 that are used at roadside installation are not sufficiently frangible to use on an airport taxiway. Notably, the jersey barrier 116, which is typically made of concrete, would not be frangible enough such that when airplanes or other vehicles such as a repair vehicle struck it, it would break. This is also true for the guard rail installation 118. The street barricade 117 cannot be used on an airport taxiway because it is not stable enough. The traffic cone/barrier setup 119 cannot be used to close an airplane taxiway because the exhaust of an airplane would cause them to roll over unless it is ballasted with a sandbag. However, sandbags, are not permitted on airport taxiways because they could release sand, which could be sucked into the intake of an engine, doing major damage to the engine.

Claim 21 has been amended to require

- (B) removing the lightable rope from the supports stanchions; and
- (C) removing the supports stanchions and the bases from the path airport taxiway.

Claim 21 additionally requires positioning bases across the airport taxiway in spaced-apart fashion and attaching stanchions to the bases. As should be apparent from the above discussion, there is no teaching or suggestion in Chien of such a method.

Claim 24 has been amended to require

- (B) fastening a lightable rope carried on a reel to the supports to close the airport taxiway to vehicular traffic; ~~and~~

(C) electronically coupling the lightable rope to the reel; and
(ED) lighting the lightable rope with a single electrical power
source.

Chien, alone or in combination with York, fails to teach or suggest such a method because in York, the hot line 54 is not electronically coupled to the reel 118.

In light of the amendments to the claims and the foregoing, claims 12, 13, 21, 23, and 24 are believed to be non-obvious over Chien.

iii. Rejection of Claims 14, 16, and 25-30

The rejection of claims 14, 16, and 25-30 as being unpatentable over York in view of Chien is respectfully traversed as the rejection may be applied to the amended claims. Claim 14 recites a barricade system for an airport taxiway. Claim 14 has been amended to require

a reel which is carried by the trailer, wherein, when the system is in use, the lightable rope includes a first end which is attached to one of the supports and a second end which is supported by the reel.

York alone or in combination with Chien, fails to teach or suggest these additional claim limitations. Nothing in York or Chien fails to suggest modifying the reel 118 of York to have a lightable rope supported by the reel 118 when the system is in use.

Claim 16 recites a system for closing an airport taxiway to vehicular traffic. Claim 16 has been amended to require “signage carried by at least one stanchion.” The York patent, alone or in combination with the Chien patent, fails to teach or suggest such

a system. Notably, in Chien, the only barricade system that includes a sign has the sign hanging from the rope-like electro-luminescent lighting element 115 such that it is hung *between* the two traffic cones, as is shown in Fig. 6D. In contrast, the claimed system requires that the signage be carried on at least one stanchion. This provides a system that is more easily set up and taken down. To set up the system shown in Fig. 6D of the Chien patent, the sign would have to be threaded onto the element 115 and then the element 115 would be placed over the traffic cone. Furthermore, to take down the system of Chien, both the element 115 would have to be removed from the traffic cones and the sign unstrung from the element 115, which would consume time. Moreover, if the sign of Chien were struck, it could fly off the element 115 and be sucked into the engine intake.

Claim 25 recites a method of closing a path. Claim 25 has been amended to require “positioning the trailer in a position spaced from the airport taxiway.” The combination of York and Chien fails to teach or suggest such a method because in York the trailer 10 is not positioned away from the corral. Instead, when the corral of York is formed, the trailer becomes part of the corral.

Claims 26-30 are believed to be condition for allowance for being dependent on claim 25.

For instance, claim 29 requires that during the lighting step, “the trailer is located laterally adjacent the airport taxiway.” In York, the trailer could not be located laterally

adjacent the corral during a lighting step because the trailer is part of the corral.

Therefore, there is no teaching or suggestion of this further claim limitation.

In light of the amendments to the claims and the foregoing, withdrawal of the rejection of claims 14, 16, and 25-30 is respectfully requested.

3. New Claims

The claim 31 has been added. Claim 31 depends from claim 16 and further requires “wherein the signage is permanently mounted to the stanchion.” Benefits of permanently mounting the signage include further reduced set up and take down times and further assurance that the signage will not fly off and be sucked up into an engine intake.

New claims 32 and 33 have been added and depend from claims 4 and 14, respectively. Claims 32 and 33 both further require “wherein the lightable rope is electrically coupled to the reel when the system is in use.” As is discussed above with respect to claim 24, York and Chien, alone or in combination, fail to teach or suggest this limitation.

CONCLUSION

It is submitted that original claims 1-30 are in compliance with 35 U.S.C. §§ 102 and 103 and each defines patentable subject matter. A Notice of Allowance is therefore respectfully requested. No fee is believed to be payable with this communication.

Nevertheless, should the Examiner consider any other fees to be payable in conjunction with this or any future communication, the Director is authorized to direct payment of such fees, or credit any overpayment to Deposit Account No. 50-1170.

The Examiner is invited to contact the undersigned by telephone if it would help expedite matters.

Respectfully submitted,



Timothy Newholm
Registration No. 34,400

Date: June 16, 2003

BOYLE FREDRICKSON NEWHOLM
STEIN & GRATZ S.C.
250 Plaza, Suite 1030
250 East Wisconsin Avenue
Milwaukee, WI 53202
Telephone: (414) 225-9755
Facsimile: (414) 225-9753